

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The following table shows the average sea level pressure for the month as well as the highest and lowest readings at a number of land stations on the coast and islands of the North Atlantic. The readings are for 8 a. m. 75th meridian time, and the departures are only approximate, as the normals are taken from the Pilot Chart and are based on Greenwich mean noon observations, which correspond to those taken at 7 a. m. 75th meridian time.

Station	Highest pressure	Date	Lowest pressure	Date	Average pressure	De-parture
St. Johns, Newfoundland	30.24	28	28.80	17	29.83	-0.14
Nantucket	30.36	13	29.74	25	29.97	-0.03
Hatteras	30.26	4, 29	29.84	19	30.06	+0.05
Key West	30.10	25	29.96	12, 13, 16	30.02	+0.02
New Orleans	30.16	30	29.92	7, 8	30.03	+0.08
Swan Island	29.98	20	29.78	3	29.86	-0.01
Turks Island	30.12	20	30.00	2, 3	30.06	+0.05
Bermuda	30.44	29	30.06	7, 8	30.33	-0.13
Horta, Azores	30.48	2	29.82	8	30.24	-0.01
Lerwick, Shetland Islands	30.42	8	29.52	16	30.04	+0.24
Valencia, Ireland	30.44	10	30.02	29	30.22	+0.22
London	30.42	10	29.90	21	30.12	+0.19

The North Atlantic HIGH was apparently about normal in intensity, but during the first half of the month its crest was considerably west of its position as shown on the Pilot Chart. High pressure prevailed off the coast of Europe during the greater part of the month, and the Icelandic Low was evidently less active than usual.

The number of days with winds of gale force was considerably in excess of the normal as shown on the Pilot Chart, over the middle section of the steamer lanes, where most of the heavy weather occurred in the first decade of the month. Gales were also more frequent than usual over the region between the 40th parallel and Newfoundland. Moderate weather was apparently the rule in the waters adjacent to the European coast as well as in the territory south of the 35th parallel.

Fog was unusually prevalent over the entire ocean, the greatest amount occurring in the squares between the 40th and 45th parallels and the 65th and 70th meridians, where it was reported on 19 days. Fog was also observed on from 7 to 8 days over the eastern section of the steamer lanes and on 3 days in the vicinity of the Azores.

The Dutch S. S. *Magdalena*, from Pensacola to Buenos Aires, reported unusually strong trade winds, force 7, from the 2d to 4th between the limits 14° N., 60° W., and 12° N., 55° W.

On the 2d there was a depression central near 53° N., 35° W. that moved slowly eastward, and from the 3d to 6th the middle and eastern sections of the steamer lanes were swept by moderate to strong gales as shown by Charts VIII to XI.

On the 7th there was a low central near 50° N., 35° W. that moved but little during the next three days, and on the 10th apparently curved sharply toward the northeast, decreasing in intensity. On the 7th the storm area extended as far south as the Azores, where south-

westerly winds of gale force prevailed, accompanied by fog.

On the 8th moderate to strong gales were encountered between the 35th and 55th parallels and the 20th and 45th meridians, although on the latter date a number of vessels within these limits reported light to moderate winds.

From the 10th to 15th there ensued a period of comparatively calm weather over the entire ocean, except that on the 13th there was a slight disturbance over a limited area between the 40th and 45th parallels and the 30th and 40th meridians.

The British S. S. *Navarino*, from Norfolk to Barbados and return, reports as follows:

On June 11 at 10 a. m. (local time) in 35° N., 73° 40' W. sighted a large waterspout about 10 miles to the NW. It appeared to be traveling NE., and was intact when last seen at 11 a. m.

On the 16th there was a depression over Newfoundland that developed into a severe disturbance and on the 17th the region between the 35th and 45th parallels and 45th and 65th meridians was swept by heavy gales. This low remained nearly stationary near Newfoundland until the 21st when it apparently moved northeastward, filling in on the way. On the 18th moderate winds were the rule over this region, but on the 19th southwesterly gales prevailed between the 35th parallel and Newfoundland, while on the 20th reports of winds of gale force were received from vessels in the easterly quadrants.

The American S. S. *Esparta*, Port Limon to Boston, reports as follows:

On Sunday, June 21, at 5.55 p. m. when 9 miles off Molasses Reef (25° N., 80° 30' W.) there set in a heavy wind and rain squall. Wind NW., force 10; barometer, 30.14 inches; temperature of air, 74°.

At 7 p. m. squall passed in direction of Bahamas.

Tuesday, June 23, 3 p. m., 14 miles NE. Diamond Shoals light vessel, there set in a wind and rain squall. Wind WNW., force 10; barometer, 29.94 inches, temperature of air, 70°. Squall passed out ESE.

Both squalls were accompanied by sharp thunder and vivid lightning.

On the 23d and 24th there was a well developed depression over Newfoundland and at the time of observation on both of these dates vessels in the southerly quadrants reported moderate winds that later in the day increased to gale force.

On the 24th the trade wind off the south coast of Haiti was unusually strong, a force of 7 being recorded.

On the 25th there was a LOW off Hatteras that moved rapidly northeastward and on the 26th was central near Father Point, Quebec. On both of these dates southerly gales were encountered between the 35th and 45th parallels, west of the 60th meridian.

On the 28th vessels near the American coast between Hatteras and Nantucket reported southwesterly winds of moderate gale force, accompanied by comparatively high barometric readings and fog.

On the 29th unusually strong trade winds were reported between Jamaica and the Canal Zone.

At the time of observation on the 30th moderate weather was the rule over the entire ocean, although the American S. S. *Eastern Victor* encountered a westerly gale later in the day, as shown in table.

OCEAN GALES AND STORMS JUNE, 1925

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
North Atlantic Ocean													
Bay State, Br. S. S.	Belfast	New York	55 20N.	8 20W.	May 30	Mid. 30th.	June 5.	Inches 28.99	W	W	WSW	12.	Steady W.
Baron Wemyss, Br. S. S.	Spain	Newfound-land.	45 44N.	32 00W.	June 2.	6 a., 2d.	4th.	29.90	SW	SW., 7	WNW	WNW., 10	W-SSW.
Caronia, Br. S. S.	Queenstown.	New York	45 44N.	35 26W.	2d.	1 a., 3d.	3d.	29.67	WSW	WSW., 8	NW	10.	WSW-W.
Montrolite, Br. S. S.	Moss, Norway.	do.	56 00N.	24 40W.	2d.	4 p., 4th.	5th.	29.20	S	SW., 10	SW	SW., 10.	SSW-WSW.
Montpellier, Am. S. S.	Hamburg	Philadelphia	46 50N.	29 40W.	5th.	Noon 6th.	6th.	29.09	SSW	SSW., 8	SW	SSW., 8.	SSW-S-SW.
Brush, Am. S. S.	Rotterdam	New Orleans	37 45N.	32 50W.	6th.	4 a., 8th.	9th.	29.69	SW	SW., 8	W	SW., 8	Steady.
Hessen, Ger. S. S.	Colon	Hamburg	45 30N.	31 47W.	8th.	10 a., 8th.	9th.	29.42	WSW	WSW., 10	SW	SW., 10	Steady.
West Modus, Am. S. S.	Dundee	Houston	54 31N.	18 44W.	8th.	3 a., 9th.	10th.	29.72	SE	SSE., 3	SW	8.	SSE-SSW.
Hatteras, Am. S. S.	New York	England	40 30N.	57 35W.	16th.	6 p., 16th.	17th.	29.35	S	SW., 9	NW	SW., 10.	SW-NW.
Andalusier, Belg. S. S.	do.	Antwerp	41 30N.	56 40W.	16th.	1 a., 17th.	18th.	29.15	SW	SW., 12	WNW	SW., 12	Steady.
Baron Sempill, Br. S. S.	Fowey	Philadelphia	43 32N.	55 21W.	19th.	8 a., 19th.	19th.	29.33	SW	SW., 8	W	SW., 9	SW-W.
Carlier, Belg. S. S.	Antwerp	New York	41 55N.	52 45W.	23d.	10 p., 23d.	24th.	29.94	SSW	SSW., 11	WSW	SSW., 11	SSW-WSW.
Sixiola, Am. S. S.	New York	Colombia	37 15N.	74 04W.	25th.	6 a., 25th.	25th.	29.88	SSW	SSW., 5	SSW	8.	Steady.
Kongosan Maru, Jap. S. S.	Limerick	Norfolk	39 25N.	63 31W.	25th.	3 a., 26th.	26th.	30.08	SSW	SSW., 8	SSW	SSW., 8	Steady.
Eastern Victor, Am. S. S.	Antwerp	Philadelphia	46 31N.	31 48W.	30th.	10 a., 30th.	July 1.	30.12	WSW	W., 6.	WNW	NW., 8.	W-NW.
North Pacific Ocean													
Walter A. Luckenbach, Am. S. S.	San Pedro	Balboa	13 30N.	94 30W.	2d.	4 p., 3d.	4th.	29.53	E	E., 7	SSW	E., 7	ENE-ESE.
Margaret Coughlan, Br. S. S.	Port Alberni	do.	13 30N.	93 30W.	4th.	8 p., 4th.	5th.	29.50	N.by E.	N. by E., 8	S. by W.	SW., 9	N. N. by E.
W. H. Telford, Am. S. S.	San Pedro	do.	14 00N.	94 30W.	5th.	5 a., 5th.	5th.	29.57	NW	NW., 7	W	W., 9	NW-W.
China Arrow, Am. S. S.	San Francisco	Taku	36 50N.	165 30W.	7th.	2 a., 8th.	8th.	29.66	SE	SSE., 8	W	SSE., 8	SSE-SW-W.
Bolton Castle, Br. S. S.	Panama	Yokohama	29 50N.	156 50E.	9th.	11 a., 9th.	10th.	29.64	S	SW., 10	E	SW., 10	E-S-SW.
Makaweli, Am. S. S.	Hawaii	San Francisco	36 55N.	125 40W.	11th.	9 p., 11th.	12th.	29.94	NW	NW., 8	NW	NW., 8	Steady.
Enterprise, Am. S. S.	do.	do.	37 26N.	123 48W.	13th.	3 p., 13th.	13th.	29.82	NW	NW., 9	NW	NW., 9	Steady.
Kaga Maru, Jap. S. S.	Yokohama	Victoria	49 52N.	167 36E.	22d.	4 p., 22d.	25th.	29.40	SSE	SSE., 8	SSE	SSE., 8	Steady.
Canadian Inventor, Br. S. S.	Balboa	do.	39 08N.	124 05W.	26th.	4 p., 27th.	28th.	29.97	NW	NW., 8	NNW	NW., 8	Steady.
Canadian Prospector Br. S. S.	Vancouver	Montreal	15 00N.	95 34W.	28th.	4 p., 28th.	29th.	29.80	ENE	NE. by N, 7.	N	N., 8	ENE-NE-N.
President Grant, Am. S. S.	Seattle	Yokohama	43 17N.	155 10E.	29th.	8 p., 29th.	30th.	28.85	ESE	SE. by S.	SW	SW., 9	SE. by S-SW.
Broad Arrow, Am. S. S.	Hongkong	San Pedro	35 35N.	141 35E.	29th.	6 p., 29th.	29th.	29.60	SE	ENE., 7	ESE	NE., 8	SE-NE-E.
South Pacific Ocean													
Makura, Br. S. S.	Sydney	Wellington	35 00S.	155 01E.	18th.	4 a., 19th.	20th.	30.51	E	E., 7	ESE	E., 8	E-ESE.
Do.	Wellington	Raratonga	39 20S.	178 45E.	24th.	8 a., 24th.	25th.	29.86	N	N., 8	NE	NNE., 9	N-NNE.
Indian Ocean													
Defender, Br. S. S.	Mauritius	Calcutta	17 36N.	87 10E.	27th.	4 p., 27th.	27th.	29.51	SW	SW., 6	SW	WSW., 8	W-SW.

¹ Highest force of wind on June 4-5.

NORTH PACIFIC OCEAN

By F. G. TINGLEY

The weather of the North Pacific Ocean exhibited no unusual features during June so far as disclosed by a somewhat general survey of conditions. As may be expected at this season, pressure distribution shows relatively little variation from day to day and gales are infrequent. The month under consideration was typical in these respects. Pressure gradients for the most part were moderate and the highest wind force reported by any vessel was 10. Numerous reports of fog were received from the western section of the northern steamship routes, but few from other parts of the ocean.

The anticyclone which normally occupies the region northeast of the Hawaiian Islands was well developed throughout the month, except from the 9th to 11th, when there was an encroachment of low pressure from the northwest. During this period the lowest pressure of the month was recorded at Dutch Harbor, 29.22 inches. During the last half of June pressure was also consistently high in middle latitudes of the central part of the ocean. On the 18th and 19th vessels north and northwest of Midway Island reported readings as high as 30.52 inches. This high pressure appeared to advance from the region of Kamchatka and its eastward movement caused a reinforcement of the semipermanent area north of Hawaii, where readings of 30.40 inches or more were reported on

several days. The crest of high pressure in this region in June is normally a little more than 30.25 inches.

Pressure data for the several island stations in the eastern North Pacific, as well as for a few stations on the American coast, are given in the following table:

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
Dutch Harbor ¹	29.86	-0.13	30.40	22d.	29.22	10th.
St. Paul ¹	29.89	0.00	30.40	22d.	29.34	11th.
Kodiak ¹	29.89	-0.05	30.34	24th.	29.40	10th.
Midway Island ¹	30.02	-0.05	30.16	14th ¹	29.82	9th.
Honolulu ¹	30.04	0.00	30.13	6th.	29.98	23d.
Juneau ¹	29.97	-0.04	30.40	24th.	29.70	2d.
Tatoosh Island ¹	30.05	+0.03	30.38	23d.	29.62	2d.
San Francisco ¹	29.92	-0.04	30.08	19th.	29.70	12th.
San Diego ¹	29.90	-0.02	30.05	18th.	29.74	27th.

¹ P. m. observations only.

² 29 days.

³ And other dates.

⁴ A. m. and p. m. observations.

⁵ Corrected to 24-hour mean.

In the Hawaiian area the weather was dominated by the Pacific anticyclone to the northward as was the case in the preceding month. At Honolulu the prevailing wind direction was east, this direction being recorded in 602 hours out of 720. The highest velocity was 33 miles (from the east) on the 28th. The average velocity was 10.6 miles an hour. The rainfall at Honolulu continued to be below normal. The total amount for the month was